

July 2013



## North Shore ARC



### UPCOMING DATES

July 1st

**Canada Day!!**

Visit us on the web

[www.ve3osh.com](http://www.ve3osh.com)

North Shore ARC  
is a



Affiliated club

[www.rac.ca](http://www.rac.ca)

**"CQ FIELD DAY DEVE3NSR"**





## Behind The Mike



Hi Everyone!!

Well Summer is upon us. Field Day and Canada Day have both come and gone for another year. Hope all had a fun time at Field Day and the same for Canada Day as well.

Some of you may have kept busy on your Canada day by participating in the RAC Canada Day Contest. I unfortunately did not but would have loved to participate in that one if I had had the means to do so.

As some are aware, and I want to thank Laird and Steve for both taking care of this matter, Clint's grandma lost her battle to cancer and passed away just before Canada Day. We both thank you from the bottom of our hearts for your prayers, warm wishes, and the few cards we did receive from fellow members and a special thanks to those who came out to the visitation at Northcutt Elliott funeral home in Bowmanville to pay their respects. I know none of you I'm guessing knew her directly. Some may have known her through other family members but your coming out to support us meant a lot.

Well on to other matters. Field Day is the main theme for this months newsletter. Peter **VE3PWJ** has given me a CD of photos he took from field day, along with Doug **VA3DCE** emailed me some photos that he took prior to field day on the prep work involved. I took some photos too and have included the Flickr link to those photos in here. I have also included other Field Day related links in this newsletter courtesy of my hunts on Twitter and hope you all enjoy the different stories I found in the TWITTERVERSE.

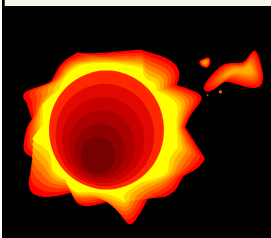
If you participated in the Canada Day contest put on by RAC I hope you had an enjoyable time and had tonnes of fun doing it too.

Well that's it for me this time around. In August I will be talking about our two events coming up in August and September and anything submitted to me after I sent the newsletter out for July will be included too.

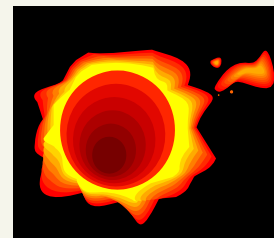
Have a wonderful summer and happy hunting on the airwaves.

73's & 88's

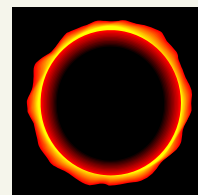
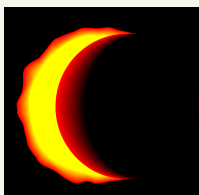
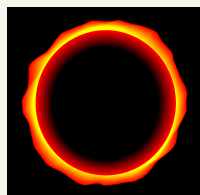
Martha



## Propagation Reports by Ray Zambonelli **VE3OUB**



<http://dx.qsl.net/propagation/propagation.html>







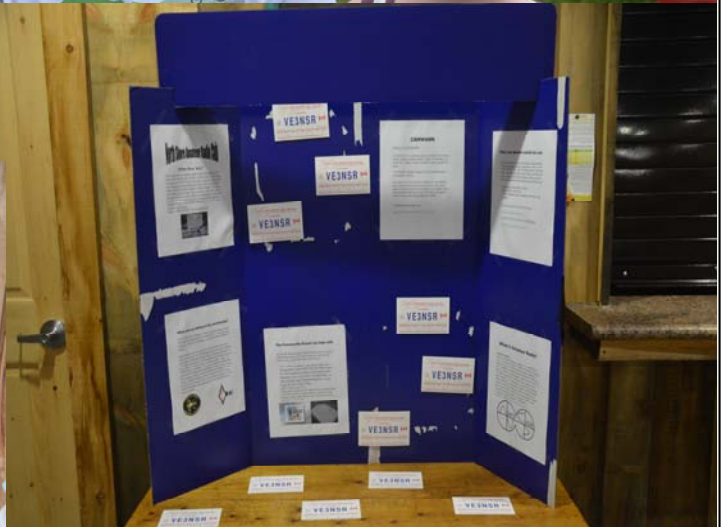
## Pre Field Day Preparations







# "CQ FIELD DAY"











These are just some of the photos taken from Field Day 2013 up at Purple Woods Conservation Area. Please enjoy the remainder on this FLICKR feed. A free photo uploading site where everyone is able to view their photos on the internet.

<http://www.flickr.com/photos/va3sbd/sets/72157634433896656>

Sign up for your Flickr account free at [www.flickr.com](http://www.flickr.com)

# THANK YOU!!!!!!

Field Day 2013 would not have been possible without the club and it's many volunteers who made it possible. We ran 3A this year (3 transmitters operating on generators). We had a wonderful turnout over the weekend even though it rained on Saturday and it was gloomy and overcast on the Sunday it was still a successful weekend. The list below is everyone who came by the site; whether it was to visit for a few minutes, bring up unexpected treat surprises during the weekend, log, operate, do tours with our VIP's, or answer questions each person helped make the weekend a successful one in some way shape or form.

If I have forgotten your name there's a reason behind that. It means you didn't sign the guest book we had down in the barn so I didn't have a record of your name and callsign. If you were there and I did forget your name I apologize and thank each and everyone personally.

For our VIP's I thank the following people for stopping by our demonstration and learning how Ham Radio plays a role in our community and how we are available should the need arise.

**Mayor John Henry for the City of Oshawa**

**Counsellor Bob Chapman local and regional counsellor for the City of Oshawa**

**Counsellor Nancy Diamond local and regional counsellor for the City of Oshawa**

For the HAMS

Steve **VA3TPS**

Bob **VE3HIX**

Ralph **VE3CRK**

Stan **VE3FLW**

Clint **VA3KDK**

Pete **VE3PWJ**

Tony **VA3ZAI**

Doug **VA3DCE**

Laird **VE3LKS**

Luis **VA3TCL**

Margaret **VE3BNN**

Nick **VE3VDH**

Glen **VE3ROQ**

Judy **VE3JYF**

Bill **VE3CRU**

Henry **VE3OEO**

Fred **VE3JWO**

Reg **N3GUN**

Jeff **VA3RTV**

For the SWL's

**Caleb Solomon**

**Todd Burgess**

Special Thanks to the Solomon Family for the yummy watermelon they sent up. Mrs Lopez (Luis's XYL) for the delicious banana cake. Margaret **VE3BNN** for the delicious chocolate cake she sent up.

Once again Steve **VA3TPS** and the rest of the field day committee thank each and everyone for their hard work and helping us making Field Day 2013 a successful one.





## Dates to Remember for the rest of the summer and into the Fall/Winter



**August 25th:** Ride 4 United Way

Contact Larry **VA3FHG** to sign up

**September 21st:** Pauls Dirty Enduro

Contact Joe **VE3VGJ** to sign up

**October 15th** Club monthly meeting at WhiteCliffe  
Terrace Retirement Residence 1900 hrs

**December 17th** **Club Christmas Potluck** *in lieu of  
a formal Christmas Party.* Contact Martha **VA3SBD** to  
answer questions

**September 17th** Club BBQ and Corn Roast

Contact Martha **VA3SBD** to answer questions

**October 6th** CIBC Run for the Cure

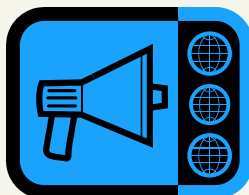
Contact Steve **VA3TPS** to sign up

**November 19th** Club monthly meeting at White-  
Cliffe Terrace Retirement Residence 1900hrs

**December 25th** **Christmas HOHOHO!!!!**

**December 31st** New Years Eve

**January 1st** **HAPPY NEW YEAR!!!!!!**



## Field Day in the TWITTERVERSE

<http://www.ckdo.ca/events/view/community-events/north-shore-amateur-radio-club-field-day-demonstration#.Ubz4XvZkdVZ.twitter>

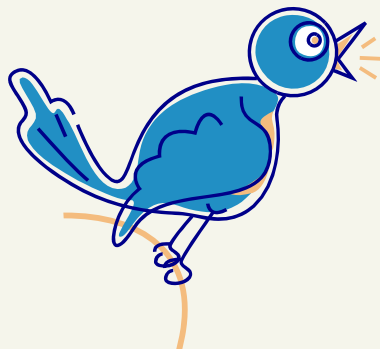
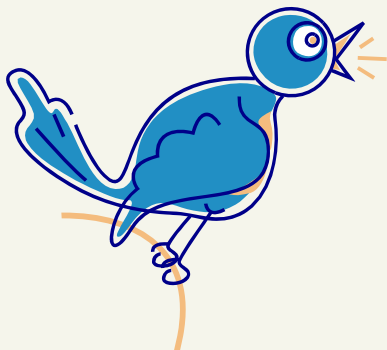
<http://www.kx96.fm/events/view/community-events/north-shore-amateur-radio-club-field-day-demonstration#.Ubz4r5-k4mZ.twitter>

<http://www.kdsanders.com/2010/video-w3ok-field-day-circa-1950>

[http://www.mydesert.com/article/20130622/NEWS01/306220032/Ham-radio-day-has-locals-connecting-La-Quinta?nclink\\_check=1](http://www.mydesert.com/article/20130622/NEWS01/306220032/Ham-radio-day-has-locals-connecting-La-Quinta?nclink_check=1)

<http://www.kjct8.com/news/local-radio-club-takes-part-in-natural-disaster-simulation/-/163152/20677556/-/i3cin2z/-/index.html>

[http://www.mercurynews.com/business/ci\\_23519384/palo-alto-radio-group-hams-its-up-day](http://www.mercurynews.com/business/ci_23519384/palo-alto-radio-group-hams-its-up-day)





# Photo Names

## Pre Field Day Photos: Page 3

Doug **VA3DCE** (all pre field day photos)

## CQ Field Day Photos: Page 4

### Top Left page 4:

Mayor John Henry, Martha **VA3SBD**, Steve **VA3TPS**

### Top Right page 4:

Margaret **VE3BNN**

### Middle Right page 4:

Glen Hayward **VE3ROQ**, Judy Yanocko **VE3JYF**

## CQ Field Day Photos: Page 5

### Top Left page 5:

Bob **VE3HIX**

### Top Right page 5:

Steve **VA3TPS**, Tony **VA3ZAI**

### Middle Left page 5:

Laird **VE3LKS**, Reg Swensen **N3GUN**, Caleb Solomon

### Middle Right page 5:

Martha **VA3SBD**

### Bottom Left page 5:

Stan **VE3FLW**, Bob **VE3HIX**

## CQ Field Day Photos: Page 6

### Top Photo page 6:

(back row l to r)

Ralph **VE3CRK**, Nick **VE3VDH**, Nancy Diamond city of Oshawa, Bob Chapman city of Oshawa

(middle row l to r)

Margaret **VE3BNN**

(front row l to r)

Stan **VE3FLW**, Bob **VE3HIX**

### Bottom Right page 6:

Luis **VA3TCL** (standing), Doug **VA3DCE** (seated front), Clint **VA3KDK** (seated back)



## **Request For Communicators**

### **By Larry Goucher**

### **VA3FHG**



Ride4UnitedWay – August 25, 2013

Club members, we are 4 operators short in providing complete communications coverage for all areas requested by the organizing committee. The 4 spots available are:

1. Time Trial Start – This is at the start of a 5 km timed course. The 5 km timed course is on Concession 7, just east of Regional Road 57. A 5 watt 2 meter handheld should be sufficient for this post. You should be at your appointed position at 8:30 am. The first rider is expected around 9:00 am and the last rider is expected at 1:30 pm.
2. Time Trial End - This is at the end of a 5 km timed course. The 5 km timed course is on Concession 7, just east of Regional Road 57. A 5 watt 2 meter handheld should be sufficient for this post. You should be at your appointed position at 8:30 am. The first rider is expected around 9:00 am and the last rider is expected at 1:30 pm.
3. Impala Cycle Maintenance Vehicle – As a communicator for a repair truck you will be dispatched to assist with minor repairs, recover bicycles and riders as required and generally support the riders along the route. A mobile 2 meter transceiver capable of 50 watts with an external antenna is a definite asset. A 5 watt handheld may not work in all locations, but an external antenna is a must have. You should be ready to start communicating from your vehicle at 7:30 am, and you may be needed until about 6:00 pm at the latest.
4. Water Truck - As a communicator for the water truck you will be dispatched to deliver water to the various feed stations and set up at pre-designated areas as directed by Net Control. A mobile 2 meter transceiver capable of 50 watts with an external antenna is a definite asset. A 5 watt handheld may not work in all locations, but an external antenna is a must have. You should be ready to start communicating from your vehicle at 7:30 am, and you may be needed until about 6:00 pm at the latest.

The organizing committee treat us very good, providing all our volunteers with a hot lunch. Last year it was a hot dog or hamburger, corn on the cob and a cold drink. If you get in early, Boston Pizza is available as well.

The organizing committee want to grow the event to 1,000 participants. It has a way to grow to reach that goal, but it will have an impact on the club over time. We will probably have to supply more communicators in more vehicles. As our membership declines, and we get older, it will be harder for the club to fulfil the role of communicators without seeking outside help from other HAM clubs.

The ride has a very informative web site, and I encourage you to have a look at it:

<http://www.ride4unitedway.com/>

If you can assist, please contact me at [va3fhg@sympatico.ca](mailto:va3fhg@sympatico.ca)

Volunteers to date are VE3RMK, VE3EPY, VA3TEE, VA3SBD, VA3KDK, VA3TCL, VA3TPS, VA3PWJ and VA3FHG.



## PROPAGATION

This page contains a dynamic collection of propagation information gathered from many different sources. This data is

extremely useful for ham radio operators and shortwave listeners to help determine whether or not long distance radio

communications are possible.

**The current time is: 03:53 UTC on Monday, July 01, 2013**

**Current Solar Indices from WWV**

01-Jul-2013 at 0305 UTC

SFI = 103 A = 11 K = 3

**Conditions during the last 24 hours**

No space weather storms were observed for the past 24 hours.

**Forecast for the next 24 hours**

No space weather storms are predicted for the next 24 hours.

**Solar Wind Data**

Provides solar wind velocity and energetic particle intensity

Updated at: 0345Z on July 1, 2013

Velocity (km/s): 530.8

Density (protons/cm<sup>3</sup>): 1.4

**Penticton Observatory SFI Measurement**

WWV only updates its SFI reading once a day at 2100Z

The Penticton solar observatory takes measurements at 1800Z, 2000Z, and 2200Z

(WWV uses the 2000Z Penticton measurement)

The Penticton Observatory SFI value on 30-Jun-2013 at 2300Z was: 105

**Three Day SFI and A-index Forecast**

(updated daily after 2200Z)

This report issued on Jun 30, 2013 at 2200Z

**Date SFI A-index**

30 Jun 110 8

01 Jul 110 5

02 Jul 105 10

**Solar Activity Forecast**

Solar activity is likely to be low with a slight chance for an M-class flare on days one, two, and three (01 Jul, 02 Jul, 03 Jul).

**Geophysical Activity Forecast**

Propagation <http://dx.qsl.net/propagation/propagation.html>

1 of 6 6/30/2013 11:58 PM

The geomagnetic field is expected to be at quiet to unsettled levels on days one and three (01 Jul, 03 Jul) and quiet levels on day two (02 Jul).

**Recent Major Solar Flare Activity**

(usually reported within 30 minutes of event peak)

No major flare activity to report

**NOAA (American) Sunspot Number**

This number is reported daily around 0225Z and reports

the number of sunspots observed in the previous 24 hour period

The NOAA Sunspot number for 30-Jun-2013 was: 85

Most recent five days (oldest first): 91 77 71 83 67

**GOES-14 Background X-ray Flux**

This value is reported daily around 0225Z and reports the

average background x-ray flux level as measured by the GOES-14 satellite

The GOES-14 Background X-ray Flux level on 30-Jun-2013 was: B3

Most recent five days (oldest first): B3 B3 B2 B2 B1

## Auroral Activity

Aurora (also known as "aurora borealis" or "northern lights") is caused by interaction between the Earth's magnetic field and the solar wind (a mix of charged particles blowing away from the sun). During storms, enough of these charged particles make it through to the Earth's upper atmosphere that they interact with the earth's natural magnetic field lines. When enough of these particles collide, energy is released in the form of auroral light. In addition to creating a pretty light show (mostly in upper latitudes), ham radio signals scatter off of these particles and can greatly enhance propagation on the VHF and UHF ham radio bands. High levels of aurora can also make HF ham radio propagation via polar routes difficult.

### Real-Time

#### Northern Hemisphere

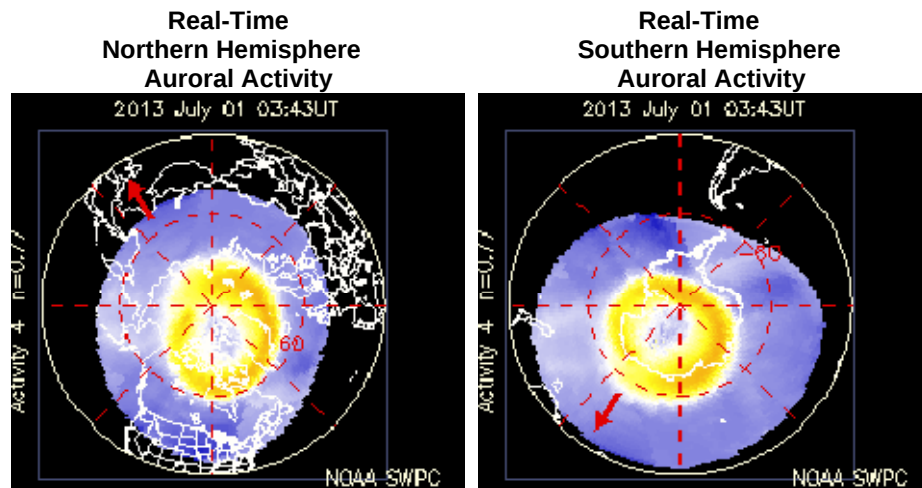
### Auroral Activity

### Real-Time

#### Southern Hemisphere

### Auroral Activity

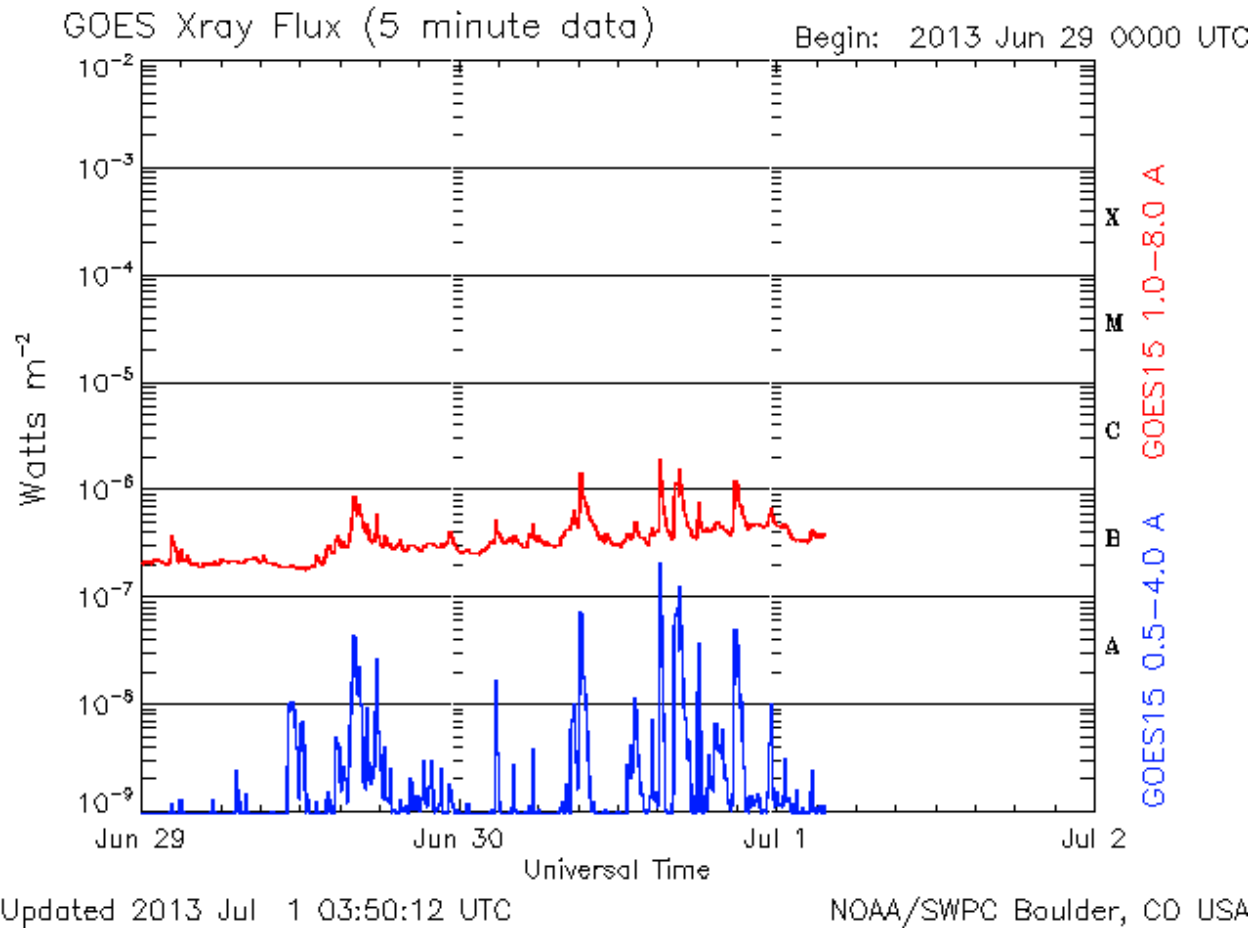
Click on thumbnails to view a larger image



Images courtesy of the [NOAA Auroral Activity site](http://www.noaa.gov/aurora)

## Solar X-ray Flux

This chart shows X-ray flux levels as measured by the GOES-14 satellite. The measurements (shown in red) are used to issue alerts when X-ray flux levels exceed certain levels. Spikes on the chart correspond to solar flares. Flares are considered "significant" when flux levels rise above the "M" level (as shown on the right side of the chart). These large flares can often wipe out the ham radio and shortwave bands almost immediately and it can take minutes to hours for the bands to recover. If the ham radio bands seem to go dead all of a sudden, it is always a good idea to check this chart to see if a large flare has occurred recently.



Dynamically updating plots:

[5-minute X-ray](#) [1-minute X-ray](#) [Satellite Environment](#)

[K-index](#) [Proton Flux](#) [Electron Flux](#) [GOES Magnetometer](#)

#### Grey Line Map

The grey line is a band around the Earth that separates the daylight from darkness. Radio propagation along the grey line

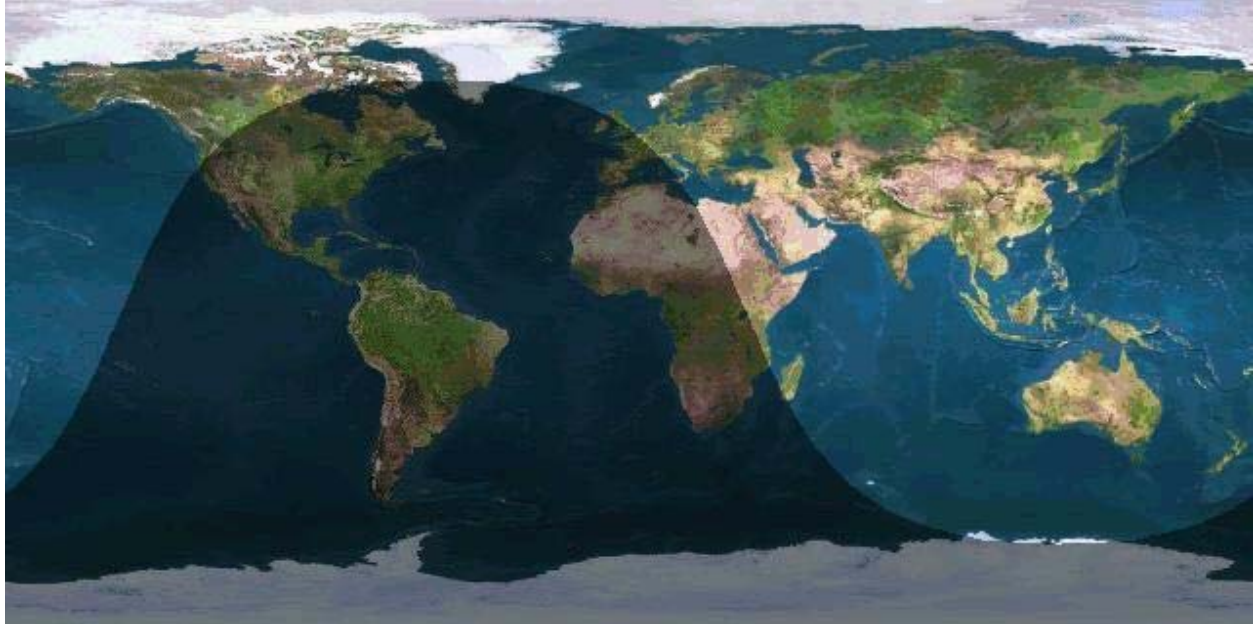
is very efficient. One major reason for this is that the D layer, which absorbs HF signals, disappears rapidly on the sunset

side of the grey line, and it has not yet built upon the sunrise side. Ham radio operators and shortwave listeners can

optimize long distance communications to various areas of the world by monitoring this area as it moves around the globe.

This map shows the current position of the grey line terminator.





[Click here to show a dynamically updating Grey Line map](#)

#### **Near-Real-Time MUF map**

The following map shows Maximum Usable Frequencies (MUFs) for 3000 kilometer radio signal paths. More importantly, the current sunspot number (SSN) and Planetary A-index are updated every 30 minutes on the bottom of this image.

Additionally, the grey line position, auroral ovals, and sun position are provided. Click on the map for more details on how to use it.

This image courtesy of [Solar Terrestrial Dispatch](#)

#### **Current Sun Images**

The images below are current views of the sun shown at different wavelengths of light as taken by SOHO and the Yohkoh soft-X-ray telescope. Generally, more bright regions on the disk indicates more solar activity, which usually leads to higher flux levels (which also often leads to better ham radio and shortwave propagation). Click on any thumbnail to view a larger image.

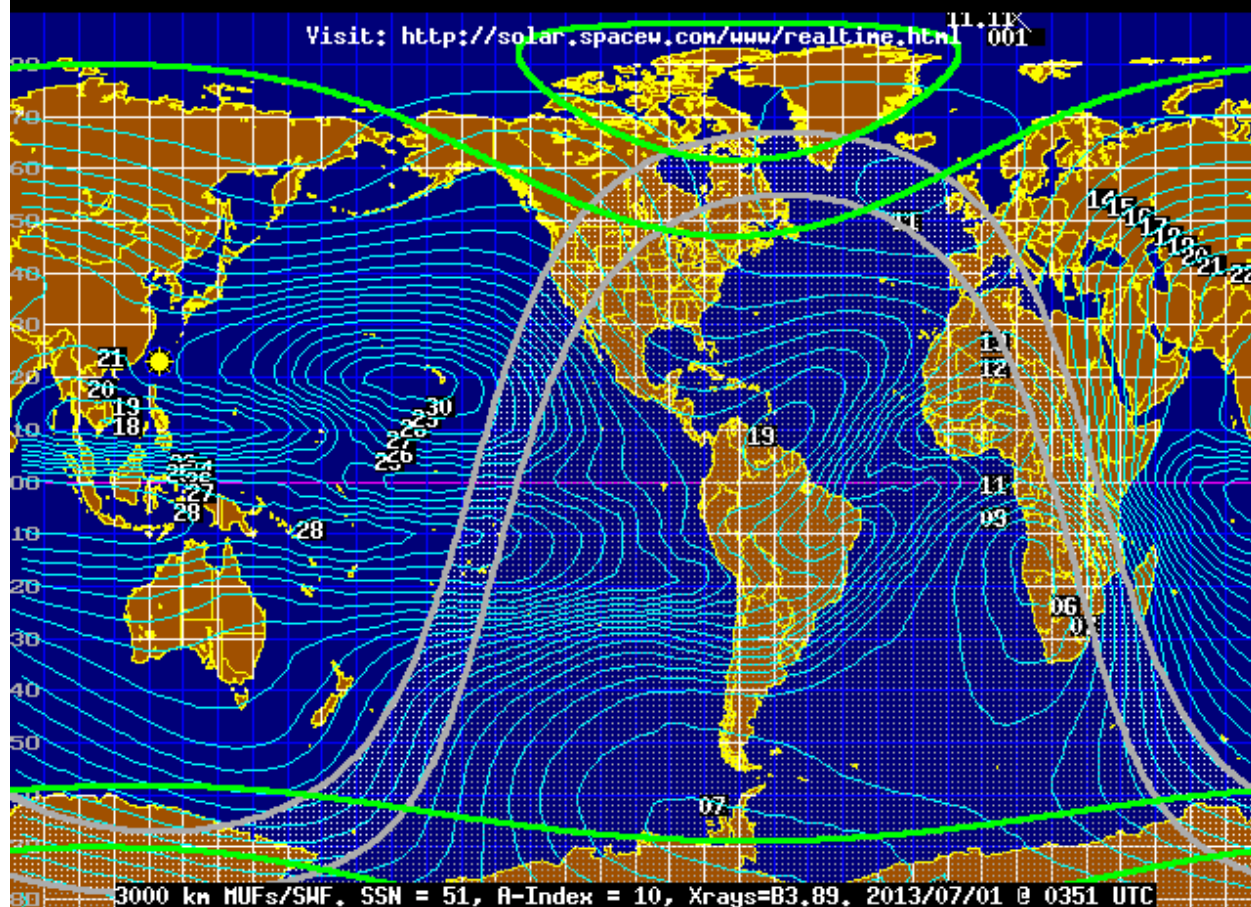
**SOHO - 17.1nm SOHO - 19.3nm**

**SOHO - 21.1nm SOHO - 30.4nm**

# NEW Proplab-Pro Version 3.0

<http://www.spacew.com/proplab>

*Full Windows compatibility and more horse-power under the hood than you can imagine!*



This image courtesy of [Solar Terrestrial Dispatch](#)

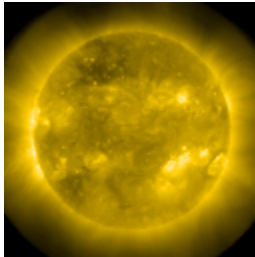
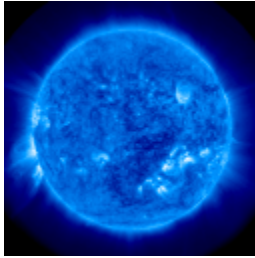
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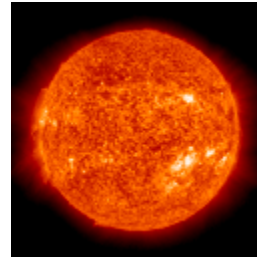
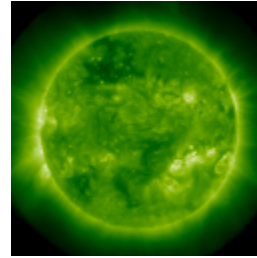
soft-Xray telescope. Generally, more bright regions on the disk indicates more solar activity, which usually leads to higher

flux levels (which also often leads to better ham radio and shortwave propagation). Click on any thumbnail to view a larger image.

SOHO - 17.1nm



SOHO - 19.3nm



Sometimes you may see the text "CCD Bakeout" instead of the images. This occurs when NASA does routine maintenance

and calibration on the cameras. For a more technical explanation, [read NASA CCD Bakeout explanation](#).

Images courtesy of the [SDAC](#) at the NASA Goddard Space Flight Center

Layout and dynamic reports created by amateur radio N6RT

Comments or Questions? Email [dxwebmaster@qsl.net](mailto:dxwebmaster@qsl.net)



# COMMUNICATE WITH KENWOOD

## TS-590S HF + 6 Metre Transceiver



*Reveals signals that would be hidden to lesser rigs.*

DSP technology has been taken to the next level with the TS-590S. A 32-bit DSP is deployed from the IF stage forward, the TS-590S marks a bold new chapter in Kenwood's proud history of making compact, high-performance transceivers. The heavy-duty TX design is capable of withstanding long hours of operation under grueling conditions.

## TS-990S HF + 6M and Dual RX!



*Nothing else like it on the market today!*

Dual TFT displays and dual receivers along with ethernet, USB and optical ports set Kenwood's new flagship top-of-the-line model apart from anything else on the market. 200W output. Built-in power supply and auto tuner. More info on our web site.

## TH-F6A Tri-Band HT with Wide RX



- 5W on ALL THREE BANDS! (3 power levels)
- Up to 8 groups of 50 channels per memory bank
- Wide RX from 0.01~ 1300 MHz\* AM/FM/CW/SSB
- Built-in CTCSS encode/decode/DCS
- Time out timer and auto power off
- MIL-STD 810 for vibration, shock and light rain
- 7.4 Volt 2000 mAh Lithium Ion battery
- Built-in battery charging system

## TM-D710A Dual Band Mobile with TNC

"APRS" data communication system capable of exchanging position information, messages and operating frequency.

- 1000 memory channels
- 50W on VHF and UHF
- NOAA weather alert
- Amber or green display
- Built-in AX.25 compliant TNC
- NMEA 0183 GPS I/O port
- Sound card interface built-in
- Dual receive even on the same band



## TM-281A 2 Metre Mobile

- 200 memory channels
- 65W output
- Alphanumeric display
- Weather alert feature
- Front firing speaker
- Illuminated keys
- Multiple scan functions
- Rugged mil-spec construction
- CTCSS/DCS encode/decode



## TH-D72 Dual Band HT with Internal GPS

- 1000 alpha memory channels
- Dual frequency receive
- Built-in GPS, TNC and APRS firmware
- EchoLink ready
- Autodial
- Stand-alone digipeater
- Mini-USB connector for enhanced computer connectivity
- CTCSS/DCS
- MIL-STD810 and IP54 weatherproofing



## TH-K20A 2 Metre 5.5W HT



- Compact and simple to use
- Weighs just 7.4 oz (210g)
- 200 memories with 6 digit memory names
- Full 5.5W output
- Rugged waterproof MIL Spec design
- Backlit display and keypad
- CTCSS encode/decode + tone burst
- Includes li-ion battery & drop in charger

## TM-V71A Dual Band Mobile

Compatible with EchoLink® radio VoIP system.

- 1000 memories
- 5/10/50W VHF/UHF
- Invertible front panel
- Cross band repeat
- Weather alert feature
- Multiple scan modes
- RX 118 - 524 MHz & 800 - 1300 MHz (less cell)
- Dual receive even on the same band VxV, UxU
- CTCSS encode/decode & 1750 Hz tone burst
- Detachable face with optional separation kit



May - Aug M-F 9-5 Sat 9-2 Sept - Apr M-F 9-5 Sat 9-3  
10-1380 Hopkins St., Whitby, ON L1N2C3  
Tel: (905) 665-5466 Fax: (905) 665-5460

**1-888-426-1688**  
**www.DurhamRadio.com**

